

Water-Data Report 2006

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°35'41", long 75°11'23" referenced to North American Datum of 1983, Pohatcong Township, Warren County, NJ, Hydrologic Unit 02040105, on left bank just upstream of suspension bridge at Riegelsville, 600 ft upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931), and at river mile 174.8. Water-quality samples are collected from the bridge and are not affected by the flow of the Musconetcong River.

DRAINAGE AREA.--6,328 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Continuous-record gaging station, water years 1906-71. Annual maximum, water years 1972 to current year.

GAGE.--Crest-stage gage. Datum of gage is 125.12 ft above NGVD of 1929.

REMARKS.--Satellite stage telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340,000 ft³/s, Aug 19, 1955, gage height, 38.85 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Maximum discharge, 255,000 ft³/s, Jun 29 at 1500, gage height, 33.62 ft.

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1934, 1943, 1950, 1960-79, 1991 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia plus organic nitrogen (00623), filtered nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). The flow of the Musconetcong River is included in the instantaneous discharge, (00061). Bacteria samples were collected synoptically over a 30-day period during the summer.

COOPERATIVE NETWORK SITE DESCRIPTOR: Delaware River Main Stem, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 11.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJDEP. Bacteria samples were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria were performed by the NJ Department of Health and Senior Services.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Instan- taneous dis- charge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)
Nov 29...	1030	9,230	2.3	.079	.059	760	11.7	95	7.8	172	14.0	6.1	61
Feb 22...	1030	10,600	1.4	.055	.041	760	12.9	95	7.9	186	1.5	2.4	64
May 03...	1030	10,300	2.0	.058	.045	755	9.3	93	7.8	154	12.0	15.0	50
Aug 22...	1045	4,940	1.9	.076	.057	760	7.1	86	8.0	230	18.0	24.6	78

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Nov 29...	16.0	5.10	1.27	10.2	41	14.6	<.10	4.2	14.7	95	91	<1	.20
Feb 22...	16.8	5.37	1.20	11.1	42	16.9	E.07	4.3	15.3	101	106	<1	.33
May 03...	13.5	4.01	1.03	8.76	35	14.3	E.07	2.5	12.7	81	89	3	.19
Aug 22...	19.5	7.05	1.60	11.6	57	18.8	E.06	3.1	20.1	121	129	<1	.20

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 4

[Remark codes: <, less than; E, estimated.]

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
Nov 29...	.029	.88	<.02	1.1	--	.027	.031	.041	.1	<.1	<.1	2.3	<1.0
Feb 22...	.069	.97	<.02	1.3	--	.020	.027	.033	<.1	<.1	.2	1.5	<1.0
May 03...	.035	.63	.08	.82	.90	.025	.028	.041	.5	<.1	.5	2.0	<1.0
Aug 22...	.020	1.12	.04	1.3	1.4	.065	.063	.070	.4	<.1	.4	2.0	E1.7

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER
2005 TO SEPTEMBER 2006

Part 4 of 4

[Remark codes: <, less than;
 E, estimated.]

Date	Boron, water, flt'd, ug/L (01020)
Nov	
29...	12
Feb	
22...	13
May	
03...	11
Aug	
22...	19

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Date	Time	Instan- taneous dis- charge, cfs (00061)	Temper- ature, water, deg C (00010)	Entero- cocci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, ECbroth water, MPN/ 100 mL (31615)
Aug						
10...	0920	5,250	--	100	10	40
17...	0915	5,050	24.5	50	20	130
24...	0915	5,280	24.4	160	110	40
31...	0930	22,200	19.8	370	600	300
Sep						
07...	0930	8,810	18.5	70	20	130